

# PATENT ABSTRACTS OF JAPAN

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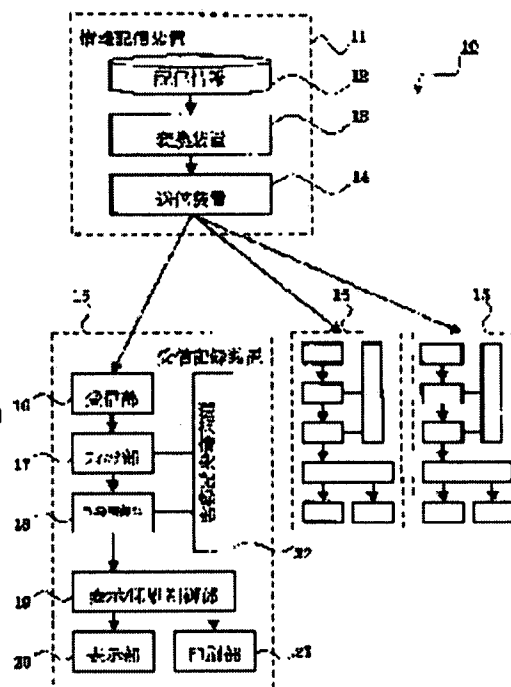
## (54) INFORMATION DELIVERY SYSTEM

(57)Abstract:

**PROBLEM TO BE SOLVED:** To provide an information delivery system enabling a user to easily and surely browse desired or important information, while reducing the possibility that the capacity of a recording device will become full and, even if the capacity of the recording device becomes full, preventing automatic erasing of important data which the user does not want to erase.

**SOLUTION:** The information delivery system includes an information delivery device 11 which delivers information along with kind information showing the kind of contents of this information, and a reception recording device 15 receiving the delivered information and recording the information selected based on a determination as to whether or not the delivered information should be

recorded according to the kind information. Thus, by referring to the kind information, the user can determine whether or not the delivered information is necessary. Recording unnecessary information can be avoided, and a reduction in the amount of information recorded reduces the possibility that the capacity of the recording device becomes full, while facilitating retrieval of desired or important information and reducing the possibility of missing it.



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## LEGAL STATUS

[Date of request for examination]

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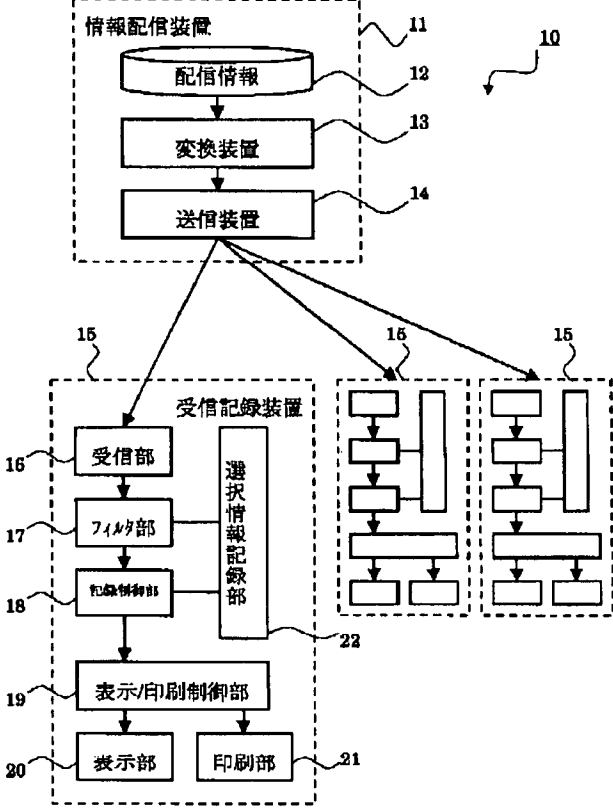
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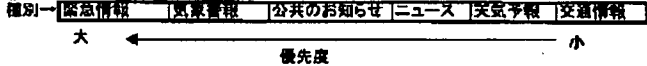
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DRAWINGS

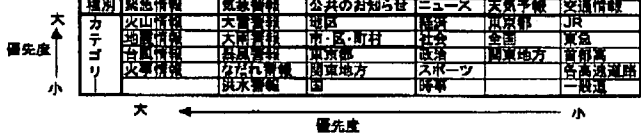
[Drawing 1]



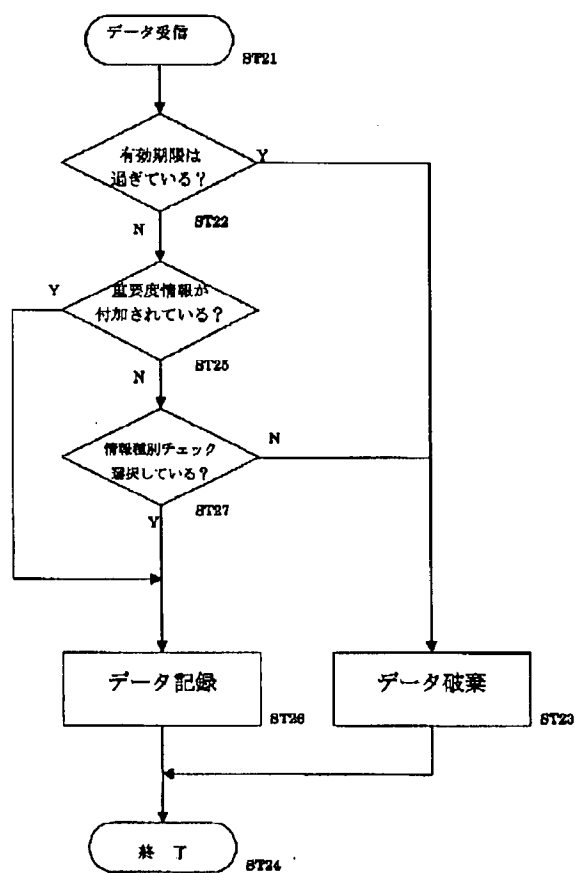
[Drawing 2]



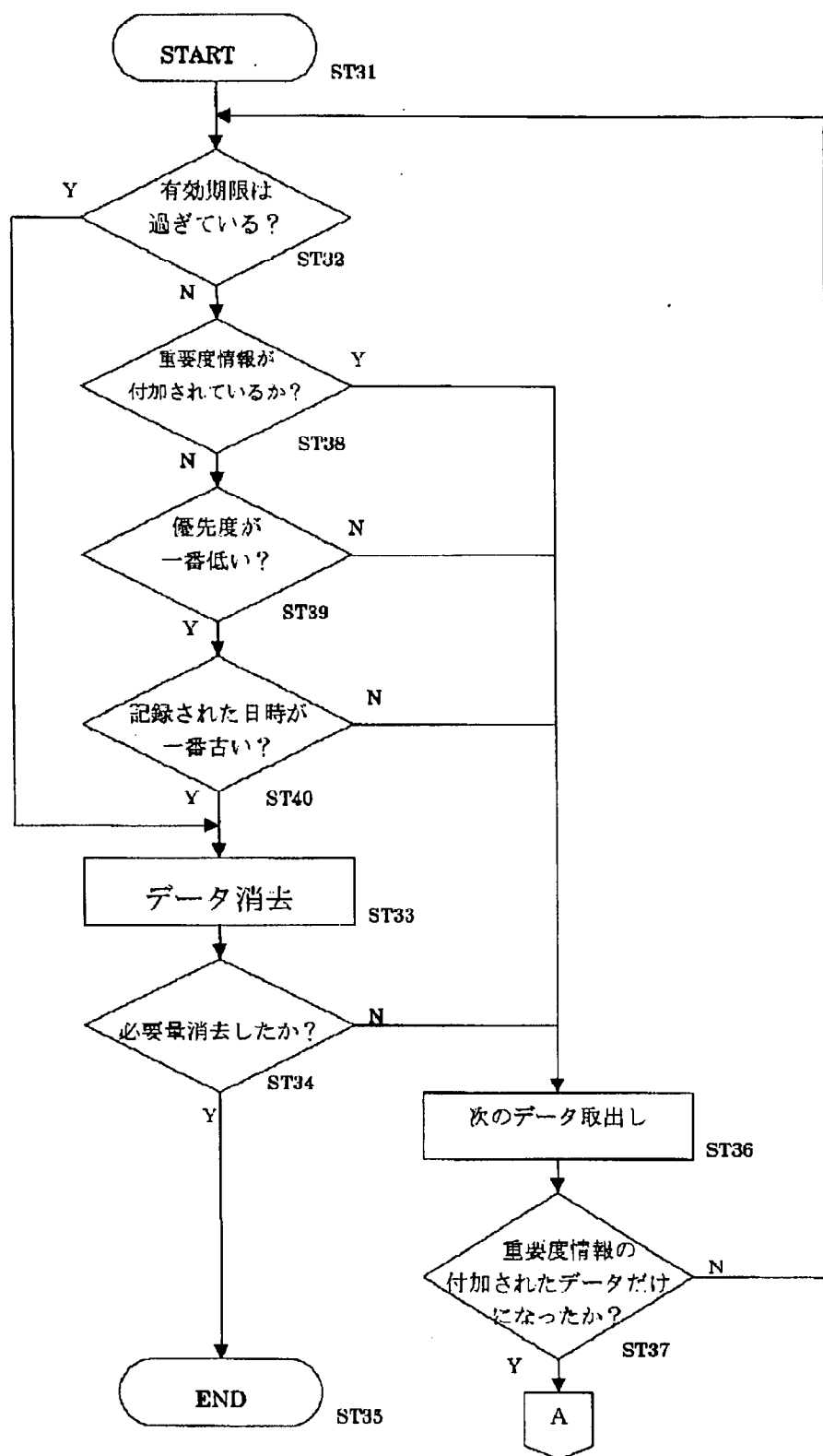
[Drawing 3]



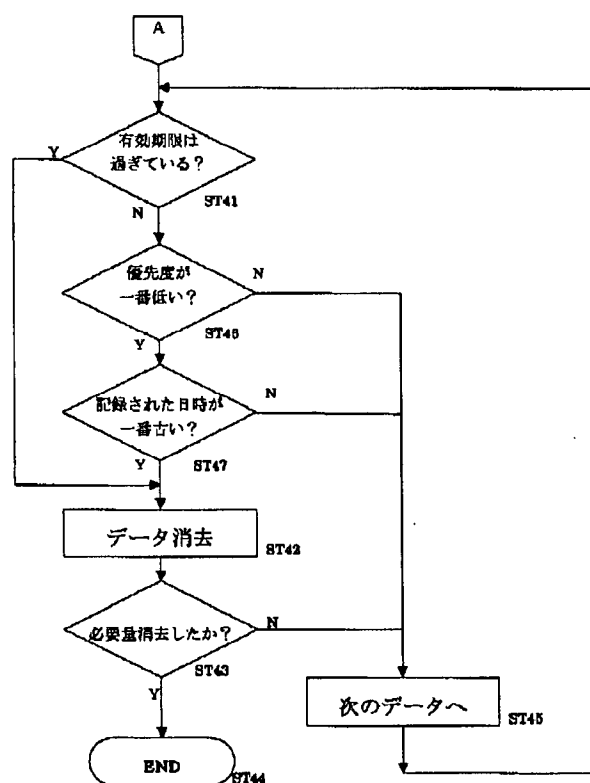
[Drawing 4]



[Drawing 5]



[Drawing 6]



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DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] It is the block diagram showing the information distribution structure of a system of this invention.

[Drawing 2] It is drawing explaining an example of the selection information Records Department of the information distribution system of this invention.

[Drawing 3] It is drawing explaining other examples of the selection information Records Department of the information distribution system of this invention.

[Drawing 4] It is a flow chart explaining the actuation at the time of reception of the receiving recording apparatus of the information distribution system of this invention.

[Drawing 5] It is a flow chart explaining the procedure when reducing the amount of information which the receiving recording apparatus of the information distribution system of this invention recorded.

[Drawing 6] It is a flow chart explaining the procedure when reducing the amount of information which the receiving recording apparatus of the information distribution system of this invention recorded.

[Description of Notations]

10 Information Distribution System

11 Information Distribution Equipment

12 Delivery Information

13 Inverter

14 Sending Set

15 Receiving Recording Device

16 Receive Section

17 Filter Section

18 Record Control Section

19 Display/Printing Control Section

20 Display

21 Printing Section

22 Selection Information Records Department

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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] About an information distribution system, the means of signal transduction of wireless or a cable is used especially for this invention, and it is concerned with the receiving recording apparatus of a large number which receive and record the distributed information from the information distribution equipment which distributes information at coincidence and the information distribution system of a broadcasting mold which distribute information all at once.

[0002]

[Description of the Prior Art] The means of signal transduction of wireless, such as teletext broadcast of an AM-FM-VHF band, CATV, and an electric light line, or a cable is used in recent years. The emergency intelligence at the time of disaster, the alarm on the weather and a warning, public information, news, Information with various weather report, living information, traffic information, leisure information, entertainments information, etc. Coincidence and the information distribution system of a broadcasting mold distributed all at once have appeared in the receiving recording apparatus of a large number which are installed in a general user's room, and receive and record the distributed information from the information distribution equipment which distributes information. In this broadcasting type of information distribution system, the power source of a receiving recording device is turned on, it is only made reception and a recording mode, various information mentioned above is received automatically, and a user is recorded on mass recording devices, such as a hard disk built in this receiving recording device, and DVD.

[0003]

[Problem(s) to be Solved by the Invention] However, in such an information distribution system, since an informational distribution person has to distribute all the information needed for all users in spite of liking of user each towards many users coincidence and in order to distribute information all at once, he has distributed a huge quantity of information. Since only required information could not be chosen, it could not receive and it could not record out of the distributed information fundamentally by the user side by that cause, the user received and recorded the information to which the huge amount was distributed, is the request out of the information on which the huge amount was recorded, or had to retrieve and peruse important information. Therefore, there was a problem of being a request, or taking time amount although important information is retrieved and perused. Moreover, when searching out of the information on which the huge amount was recorded, it is a request or there was a problem that important information might be overlooked.

[0004] Furthermore, since a huge quantity of information was recorded, the capacity of a recording device became full and there was a problem of it becoming impossible to record the information received newly. Moreover, the time distributed when it was the approach although the approach of eliminating from old information automatically also had the time distributed in order to prevent it had the problem that even important data not to eliminate although it is old will be eliminated automatically.

[0005] It aims at this invention being made in view of these points, or it is a request, and being able to

peruse important information simply and certainly, and capacity of a recording device being unable to become full easily, and offering the information distribution system which important data not to eliminate even if the capacity of a recording device becomes full are hard to be eliminated automatically, is convenient, and is easy to use.

[0006]

[Means for Solving the Problem] The information distribution system of this invention was equipped with the information distribution equipment which adds and distributes the classification information which shows the classification of the contents of the information to the information to distribute, and the receiving recording device which receives said distributed information, judge choice according to said classification information, and record said selected information as a solution means for solving said technical problem. By having considered as this configuration, when informational important point/needlessness which received refer to classification information, it can judge, it is not necessary to record unnecessary information, and since the information to record decreases, while the capacity of a recording device stops being able to become full easily and retrieval of a request or important information becomes easy, possibility of overlooking also decreases.

[0007] Moreover, said information distribution equipment added and distributed significance information, when said information to distribute was important, and when said significance information was added to said received information, said receiving recording device is not concerned with said classification information, but was recorded. By having considered as this configuration, since important information is surely recorded, while possibility of overlooking important information decreases, the distributed information is important or that unimportant discernment becomes easy.

[0008] Moreover, said information distribution equipment added and distributed the expiration date information which shows the expiration date of the information further to said information to distribute, and when said received information had passed over said expiration date, said receiving recording device is not concerned with said significance information and said classification information, but it was made not to record it. Since the information which it is not necessary to record and is recorded by having considered as this configuration when the distributed information has passed over the expiration date decreases, the capacity of a recording device stops being able to become full easily.

[0009] Moreover, said receiving recording device was eliminated when said recorded information had passed over said expiration date. Since it is eliminated when the recorded information has passed over the expiration date by having considered as this configuration, the capacity of a recording device stops being able to become full easily.

[0010] Moreover, when a priority was added for said every classification information and said recorded amount of information was reduced, without adding said significance information, said priority of said receiving recording device is low, and it was eliminated sequentially from the old information on the recorded date. When reducing the recorded amount of information by having considered as this configuration, while important information becomes is hard to be eliminated, the information that a priority is high becomes that it is hard to be eliminated.

[0011] Moreover, said information to distribute was distributed by broadcasting. By having considered as this configuration, the information distribution structure of a system becomes easy, and can build cheaply.

[0012] Moreover, the criteria of said choice were changed by operating said receiving recording device. Since the criteria of the choice by the classification of the information distributed from the addressee side can be changed, for an addressee, it is convenient and easy to use by having considered as this configuration.

[0013] Moreover, said information distribution equipment distributed the update information which makes the criteria of said choice change into said receiving recording device, and the individual information given to said receiving recording device, and when said individual information was in agreement with its thing, said receiving recording device receives said update information, and changed the criteria of said choice. Since the criteria of the choice by the classification of the information distributed when an addressee requested a distribution person, even if elderly people etc. were not able

to do actuation of a machine can be changed, for an addressee, it is convenient and easy to use by having considered as this configuration.

[0014] Moreover, said receiving recording device was considered as the configuration which has the display and/or the printing section to print which choose and display said recorded information. By having considered as this configuration, since an addressee can choose, display or print the information on desired, he becomes convenient for an addressee.

[0015] Moreover, it was made to display on information low from the information that it is [ of said priority ] high, in order, without said receiving recording device's adding a priority for said every classification information, adding said significance information in the beginning out of said information currently recorded, and adding said significance information to information low from the information that it is [ of said priority ] high, next. By having considered as this configuration, since an addressee is displayed sequentially from the information that significance is high and that a priority is high even if he searches and does not choose from the recorded information, facilities or possibility to like of overlooking important information decreases for an addressee while becoming.

[0016]

[Embodiment of the Invention] Hereafter, the gestalt of operation of the information distribution system of this invention is explained based on drawing 1 - drawing 6 . Drawing 1 is the block diagram showing the information distribution structure of a system of this invention. First, drawing 2 It is drawing explaining one example of the selection information Records Department of the information distribution system of this invention. Drawing 3 It is drawing explaining other examples of the selection information Records Department of the information distribution system of this invention. Drawing 4 It is a flow chart explaining the actuation at the time of reception of the receiving recording apparatus of the information distribution system of this invention, and drawing 5 and drawing 6 are the flow charts explaining the procedure when reducing the amount of information which the receiving recording apparatus of the information distribution system of this invention recorded.

[0017] First, in drawing 1 , the information distribution system 10 of this invention consists of information distribution equipment 11 which distributes information, and a receiving recording device 15 of a large number which receive and record the distributed information. This receiving recording device 15 is installed in many general users' room, and information distribution equipment 11 and the receiving recording device 15 are performing distribution/reception using the means of signal transduction of wireless, such as teletext broadcast of an AM-FM-VHF band, CATV, and an electric light line, or a cable. Moreover, information distribution equipment 11 performs distribution of coincidence and the broadcasting mold distributed all at once for the information on various contents, such as the emergency intelligence at the time of disaster, the alarm on the weather and a warning, public information, news, a weather report, living information, traffic information, leisure information, and entertainments information.

[0018] Delivery information 12, the inverter 13, and the sending set 14 are formed in information distribution equipment 11. The information on various contents which delivery information 12 mentioned above is memorized, and is chosen as delivery information of this time [ part / the ]. When it is judged that earthquake information, a heavy rain warning, etc. are important for a user as for the classification information which shows the classification of the contents whose information of the mentioned the inverter 13 above in delivery information 12, and its information, supposing significance information and the information on the information are information of an athletic meet, the expiration date information used as meaningless information adds after the days, such as a day of the athletic meet, and it will change into the data of a gestalt which can be distributed. Moreover, in addition to classification information, an inverter 13 is changed, and you may make it add the category information which subdivided an informational classification further. A sending set 14 transmits the data of a gestalt which the inverter 13 changed and which can be distributed with a broadcasting mold.

[0019] Next, the receiving recording device 15 consists of a receive section 16, the filter section 17, the record control section 18, a display/printing control section 19, a display 20, and the printing section 21. A receive section 16 receives the data transmitted from the sending set 14 of information distribution

equipment 11. The filter section 17 selects the data which the receive section 16 received, and the selected information cancels delivery and the information which is not chosen to the following record control section 18. The record control section 18 records the information received from the filter section 17 on a recording device (not shown). Here, when the capacity of a recording device is full, the data considered to be the most unnecessary are eliminated in order, judging from significance, classification information, an expiration date, etc., and the information received newly is recorded. Moreover, this record control section 18 eliminates automatically the information which has passed over the expiration date in the recorded information, when a power source is turned on, or when [ a certain ] fixed period progress is carried out. Display/printing control section 19 passes the information displayed on the following display 20, and the information which the printing section 21 prints. Although this display/printing control section 19 usually displays the information received and recorded on the newest. The information currently recorded on the recording device is retrieved by actuation of a user. A display/printing carry out or It can be made to display in order by actuation of a user automatically [ information / low ] from the information that a priority is high at a certain spacing, without adding significance information and adding significance information to low information next from the information that a priority is high, out of the information currently recorded, in the beginning. A display 20 displays the information passed from display/printing control section 19, and the printing section 21 prints the information passed from display/printing control section 19.

[0020] Furthermore, the selection information Records Department 22 is established in the receiving recording device 15. The classification of the information which an addressee wants to record, and the priority when eliminating at which that classification is received are recorded on this selection information Records Department 22 in the information distributed. It is set [ as one example is shown in drawing 2 , ] up so that the classification of the information to record is recorded on a longitudinal direction in order, and it goes rightward [ illustration ], and the priority at the time of elimination may become low. Moreover, as shown in drawing 3 , this selection information Records Department 22 makes the unit of the information chosen and recorded the category which subdivided an informational classification, and it may specify a category to record as the line under that classification that belongs in order, and may consider as the shape of a two-dimensional matrix, and the category of the upper line may set it up so that a priority may become high. And the information recorded on this selection information Records Department 22 can be changed when an addressee operates the receiving recording device 15. Even if an addressee cannot do actuation of the receiving recording device 15 in elderly people's etc. reason, by requesting a distribution person moreover, a distribution person From information distribution equipment 11, the update information based on the requested contents of modification and individual information given to the receiving recording device 15, such as a number of equipment and user ID, are distributed. The receiving recording device 15 When this individual information is in agreement with its thing, update information is received and the information recorded on the selection information Records Department 22 is changed.

[0021] In the above configuration of this information distribution system 10, if information is transmitted from the transmitting section 14 of information distribution equipment 11 when having made it reception and a recording mode by ZUITCHI to which a user turns on the power source of the receiving recording apparatus 15, and does not illustrate it, as a procedure is shown in drawing 4 , it will operate in the receiving recording apparatus 15.

[0022] the data with which the receive section 16 was transmitted in drawing 4 -- receiving (step ST 21) -- the data is passed to the filter section 17. Out of the passed data, the filter section 17 identifies expiration date information, and checks an expiration date (step ST 22). When having passed over the expiration date, (Y) cancels received data (it does not record) (step ST 23), and is completed (step ST 24). When having not passed over the expiration date, (N) confirms next whether significance information is added to received data (step ST 25). When significance information is added, (Y) makes received data pass and record on the record control section 18 (step ST 26), and is ended (step ST 24). When significance information is not added, (N) confirms further whether the classification information on received data is recorded on the selection information Records Department (step ST 27). When the

classification information on received data is recorded on the selection information Records Department, (Y) makes received data pass and record on the record control section 18 (step ST 26), and is ended (step ST 24). When the classification information on received data is not recorded on the selection information Records Department, (N) cancels received data (it does not record) (step ST 23), and is completed (step ST 24). The information distributed from information distribution equipment 11 in the above actuation is selected, and the selected information is recorded on the recording device of the receiving recording device 15. In addition, when making into a category the unit of the information chosen and memorized, it changes to identification information and operates in category information, then the same procedure.

[0023] Moreover, the Delete function of the information which was equipped with when the case where the capacity of a recording device fills, and a user wanted to reduce amount of information, and was recorded is formed in the record control section 18 of the receiving recording device 15. Although it has the function which eliminates all the information that specified time and was recorded about the approach of deletion before the day, or specifies an informational classification or an informational category and eliminates all the information on the classification or a category Apart from it, when the case where the capacity of a recording device fills, and the amount of information, on which the user was recorded are specified that he wants to reduce 50%, for example As one example is shown in drawing 5 and drawing 6 , from the information over which the expiration date has passed out of the recorded information, and the information to which significance information is not added, previously, a priority is low and it also has the function eliminated sequentially from the old information on the recorded time.

[0024] In drawing 5 , the data currently recorded are taken out first (step ST 31), and that check over which the expiration date of the data has not passed is performed (step ST 32). It is confirmed whether whether the data which (Y) eliminated the data from the recording apparatus when having passed over the expiration date (step ST 33), next were received newly can be recorded now carried out initial-complement elimination (step ST 34). (Y) is ended when initial-complement elimination is carried out (step ST 35). When initial-complement elimination has not been carried out, (N) takes out the following data (step ST 36). Here, when data turn into the last data, it returns to the first data and drawing is performed. And it is confirmed whether it became only data with which significance information was added (step ST 37). When not becoming only data with which significance information was added, (N) is repeated from a step ST 32.

[0025] In a step ST 32, when having not passed over the expiration date, (N) confirms next whether significance information is added (step ST 38). When significance information is added, (Y) performs the step ST 36 or subsequent ones mentioned above. It is confirmed whether when significance information is not added, the priority of (N) of the data is still lower (step ST 39). When the priority of the data is the least low, (N) performs the step ST 36 or subsequent ones mentioned above. When the priority of the data is the lowest, it is confirmed whether the time of (Y) on which the data was recorded is the oldest next (step ST 40). When the time on which the data was recorded is the least old, (N) takes out the following data (step ST 36), and repeats them from a step ST 32. When the time on which the data was recorded is the oldest, (Y) performs the step ST 34 or subsequent ones which eliminated the data from the recording device (step ST 33), next was mentioned above.

[0026] In a step ST 37, when it becomes only data with which significance information was added, (Y) progresses to drawing 6 and performs that check over which the expiration date of the data has not passed (step ST 41). It is confirmed whether whether the data which (Y) eliminated the data from the recording apparatus when having passed over the expiration date (step ST 42), next were received newly can be recorded now carried out initial-complement elimination (step ST 43). (Y) is ended when initial-complement elimination is carried out (step ST 44). When initial-complement elimination has not been carried out, (N) takes out the following data (step ST 45). Here, when data turn into the last data, it returns to the first data and drawing is performed. In a step ST 41, it is confirmed whether when having not passed over the expiration date, the priority of (N) of the data is the lowest (step ST 46). When the priority of the data is the least low, (N) performs the step ST 45 or subsequent ones mentioned above.

When the priority of the data is the lowest, it is confirmed whether the time of (Y) on which the data was recorded is the oldest next (step ST 47). When the time on which the data was recorded is the least old, (N) performs the step ST 45 or subsequent ones mentioned above. When the time on which the data was recorded is the oldest, (Y) performs the step ST 42 or subsequent ones mentioned above.

[0027] It ends, when initial-complement elimination is repeatedly carried out until it carries out initial-complement elimination of the above procedure. In addition, what is necessary is for the user to have specified the amount of information on which the user was recorded in steps ST34 and ST43 which confirm whether initial-complement elimination was carried out when it specifies that he wants to reduce 50%, for example, just to confirm whether it became 50% of amount of information.

[0028] It can be made easy to decrease the amount of information which was made to record the information newly received while making it eliminate from unimportant information previously on a recording device with the above procedure, or was recorded on the recording device, and to search. Moreover, it is not concerned with a priority but you may make it eliminate in the old order of the recorded time by a user's selection about the information to which significance information is not added.

[0029]

[Effect of the Invention] As explained above, the information distribution system of this invention Since it had the information distribution equipment which adds and distributes the classification information which shows the classification of the contents of the information to the information to distribute, and the receiving recording device which receives the distributed information, judges choice according to classification information, and records the selected information Since the information which can judge when informational important point/needlessness which received refer to classification information, does not need to record unnecessary information, and is recorded decreases While the capacity of a recording device stops being able to become full easily and retrieval of a request or important information becomes easy, possibility of overlooking also decreases.

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CLAIMS

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[Claim(s)]

[Claim 1] The information distribution system characterized by to have the information distribution equipment which adds and distributes the classification information which shows the classification of the contents of the information to the information to distribute, and the receiving recording device which receives said distributed information, selects according to said classification information, and records said selected information.

[Claim 2] It is the information distribution system according to claim 1 characterized by said information distribution equipment adding and distributing significance information when said information to distribute is important, said receiving recording device not being concerned with said classification information when said significance information is added to said received information, but making it record.

[Claim 3] It is an information distribution system given in claims 1 and 2 characterized by said information distribution equipment adding and distributing the expiration date information which shows the expiration date of the information further to said information to distribute, said receiving recording device not being concerned with said significance information and said classification information when said received information has passed over said expiration date, but making it not record.

[Claim 4] Said receiving recording device is an information distribution system according to claim 3 characterized by making it eliminate when said recorded information has passed over said expiration date.

[Claim 5] Said receiving recording device is an information distribution system given in claim 2 characterized by making it eliminate sequentially from the information that said priority is low and the recorded date is old, without adding said significance information when adding a priority for said every classification information and reducing said recorded amount of information thru/or any 1 term of 4.

[Claim 6] Said information to distribute is an information distribution system given in claim 1 characterized by making it distribute by broadcasting thru/or any 1 term of 5.

[Claim 7] An information distribution system given in claim 1 characterized by changing the criteria of said choice by operating said receiving recording device thru/or any 1 term of 6.

[Claim 8] It is an information distribution system given in claim 1 characterized by for said information distribution equipment to distribute the update information which makes the criteria of said choice change into said receiving recording device, and the individual information given to said receiving recording device, to receive said update information when said individual information of said receiving recording device corresponds with its thing, and to change the criteria of said choice thru/or any 1 term of 7.

[Claim 9] Said receiving recording device is an information distribution system given in claim 1 characterized by having the display and/or the printing section to print which choose and display said recorded information thru/or any 1 term of 8.

[Claim 10] Said receiving recording device is an information distribution system given in claim 2 characterized by making it display on low information in order from the information that said priority is

high, without adding a priority for said every classification information, adding said significance information and adding said significance information to low information next from the information that said priority is high, out of said information currently recorded in the beginning thru/or any 1 term of 9.

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[Translation done.]